

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-005837**Date Inspected:** 24-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1600**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, Oregon**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Hinge K Pipe Beams**Summary of Items Observed:**

On this date, Caltrans Quality Assurance Inspector (QA) Sherri Brannon is present at the Oregon Iron Works, Inc. (OIW) jobsite in Clackamas, Oregon for the purpose of observing fabrication of the Hinge K Pipe Beams.

OIW Fabrication Shop-Bay 3:

QA Inspector Brannon randomly observed OIW qualified welder Mr. Rick Hinkle ID#H49 tack welding joining half fuse section MK#a124-7 (HPS485 W) to half fuse section MK#a124-6 (HPS485 W). The complete joint penetration (CJP) weld is identified as weld joint #WM3-18. Mr. Hinkle was observed welding in the 1G (flat) and 3G (vertical) positions utilizing flux corded arc welding (FCAW) process with a .045 inch (1.2mm) diameter electrode, filler metal brand Hobart Fabco 91K2-C class 91T1-K2J semi-automatic. The above .045 inch (1.2mm) diameter electrode was verbally approved to use for tack welding on 03-18-2009.

OIW Fabrication Shop-Bay 3:

QA Inspector Brannon randomly observed OIW qualified welder Mr. Craig Jacobson ID#J6 welding a joining hinge K pipe beam MK#a111-1 (A508 Gr. 4N Class 2) to base plate MK#a110-4(HPS 485 W) to. The complete joint penetration (CJP) weld is identified as weld joint #W2-13. Mr. Jacobson was observed welding in the 1G (flat) position utilizing submerged arc welding (SAW) process with a 2.4mm diameter electrode, filler metal brand Lincoln Electric LA85 class F9A4-Eni5-G-H2. QA Inspector Brannon observed the OIW QC CWI Inspector's Mr. Mike Gregson and Mr. Rob Walters verifying that the pre-heat and welding parameters were in accordance with the Welding Procedure Specification (WPS). Welding parameters measured by QA are as follows: 600 amps, 33.0 volts and a travel speed of 457.0 mm/min. Welding parameters observed/measured by QA Inspector Brannon appear to be in general compliance with the approved WPS 4016 revision number 0.

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OIW Fabrication Shop-Bay 3 (repair):

QA Inspector Brannon observed OIW preheating and build up welding approximately 3302mm. QA Inspector Brannon randomly observed OIW qualified welder Mr. Tim O'Brien ID#O6 and one helper butter welding ring stiffener plate MK#b125 (HPS 485 W) HT#D3147-7B. Mr. O'Brien was observed welding in the 1G (flat) position utilizing flux cored arc welding (FCAW) process with a 1.3mm diameter electrode, filler metal brand Select Arc 920-NiI class E91T1-NiI-C-H4 semi-automatic. QA Inspector Brannon observed the OIW QC CWI Inspector Mr. Rob Walters verifying that the pre-heat and welding parameters were in accordance with the Welding Procedure Specification (WPS). Welding parameters measured by QA are as follows: 260 amps, 26.0 volts and a travel speed of 482.6 mm/min. Welding parameters observed/measured by QA Inspector Brannon appear to be in general compliance with the verbally approved WPS 3049 revision number 0. QC Inspector Mr. Mike Gregson stated that OIW will submit a welding repair report (WRR-2244-10). Note: WPS 3049 was verbal approved for use in build up welding on 03-20-2009.

Material, Equipment, and Labor Tracking:

QA Inspector Brannon performed a verification of personnel at OIW. QA Inspector Brannon observed 2 Supervisor's, 3 Quality Control and 3 production personnel on this date.

The following digital photograph below illustrates observation of the activities being performed.



Summary of Conversations:

No relevant conversations on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By: Brannon, Sherri

Quality Assurance Inspector

Reviewed By: Adame, Joe

QA Reviewer
